



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/612,156

07/02/2003

Narayan Parappil Menon

I-2-0335.1US

4127

24374 7590 10/13/2009

VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA, SUITE 1600
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

EXAMINER

DUONG, CHRISTINE T

ART UNIT

PAPER NUMBER

2462

MAIL DATE

DELIVERY MODE

10/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/612,156	Applicant(s) MENON ET AL.	
	Examiner CHRISTINE DUONG	Art Unit 2462	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 16-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This is in response to the Applicant's arguments and amendments filed on 11 June 2009 in which claims 1-11, 16-18 are currently pending.

Claim Rejections - 35 USC § 103

1. Claims 1-2, 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al. (PG Pub US 2003/0134636 A1 hereafter Sundar) further in view of Camille et al. (US Patent No. 7,061,917 B1 hereafter Camille).

Regarding claim 1, Sundar discloses a method for use in wireless communications (fig. 3).

establishing a bidirectional internet protocol (IP) link at a wireless transmit/receive unit (WTRU) to allow service operation parameter negotiation prior to network selection (IP link 304, fig. 3 and "the macro network 300 can send 502 information regarding the detection or discovery process to the mobile station 310 on a successful network registration" [0068]);

However, Sundar does not explicitly disclose transmitting a request for service level system information from the WTRU over the bidirectional IP link and receiving the requested service level system information over the bidirectional IP link.

Nevertheless, Camille discloses "In order to request a specific service level specification, the service level requesting means SL_R_M of the personal computer DTE sends an Internet Protocol Control Protocol request towards the network access server DRE for assigning another service level for sending data... Subsequently the

Art Unit: 2462

service level negotiating and proposing means SL_NP_M hands the propose over to the service level proposal sending means SLP_R_M that in its turn sends an Internet Protocol Control Protocol message that contains the relevant parameters of the propose for the service level to the service level propose receiving means SLP_R_M of the data transmitting element DTE which receives the Internet Protocol Control Protocol propose for the service level” (Camille column 4 lines 4-29).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to transmit a request for service level system information from the WTRU over the bidirectional IP link and receive the requested service level system information over the bidirectional IP link because of engineering design choice and because “the service level specification negotiation and the adaptation is performed in a more efficient way” (Camille column 1 lines 40-42).

Regarding claim **2**, Sundar, Camille disclose everything claimed as applied above (see claim 1). However, Sundar does not explicitly disclose the request comprises a specific configuration, and the requested service level system information is received in the specific configuration.

Nevertheless, Camille disclose “Internet Protocol Control Protocol request ... Internet Protocol Control Protocol message” (Camille column 4 lines 6-7 and 25).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have the request comprises a specific configuration, and the requested service level system information is received in the specific configuration because of engineering design choice and because “the service

Art Unit: 2462

level specification negotiation and the adaptation is performed in a more efficient way” (Camille column 1 lines 40-42).

Regarding claim **8**, Sundar, Camille disclose everything claimed as applied above (see claim 2). In addition, Sundar discloses the request includes information regarding a first and second primary station; and the WTRU switches to the second primary station in response thereto (“FIG. 15 shows the case of the mobile station 310 roaming from a WWAN 100 to WLAN 200 environment. The mobile station 310 senses the RF strength in the proximity of the WLAN and decides to start using the WLAN environment, thus initiating a registration request” [0080] and “when the mobile station 310 roams in the WLAN 200, it continues to sense the RF energy strength of the WWAN 100 and WLAN 200” [0069]).

Regarding claim **9**, Sundar, Camille disclose everything claimed as applied above (see claim 8). In addition, Sundar discloses the first primary station is a UMTS system (WWAN 100, fig. 15) and the second primary station is a WLAN (WLAN 200, fig. 15).

Regarding claim **10**, Sundar, Camille disclose everything claimed as applied above (see claim 9). In addition, Sundar discloses the WTRU measures the strength of signals transmitted from the primary station and from the second primary station (“when the mobile station 310 roams in the WLAN 200, it continues to sense the RF energy strength of the WWAN 100 and WLAN 200” [0069]), and switches to said second station when the strength of the signal from the second station exceeds a predetermined signal strength level (“If it detects that the WLAN RF strength decreases below some threshold

Art Unit: 2462

value and the WWAN strength is above a threshold value, it initiates a registration process with the macro (WWAN) network 100” [0069]).

Regarding claim **11**, Sundar, Camille disclose everything claimed as applied above (see claim 8). In addition, Sundar discloses the primary station is a WLAN and the second primary station is a UMTS system (“FIG. 8 shows the movement of a mobile station 310 from a WLAN environment 200 to a WWAN environment 100. The mobile station 310 registers in the WWAN environment 100 as it roams from the WLAN 200 into the WWAN. Likewise the appropriate handoff must be made as well. The mobile station 310, using the network sensing method described above, infers that it needs to register with the WWAN environment” [0074]).

2. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar, Camille further in view of Rappaport et al. (US Patent No. 7,055,107 B1 hereafter Rappaport).

Regarding claim **3**, Sundar, Camille disclose everything claimed as applied above (see claim 2). However, Sundar, Camille fail to specifically disclose the specific configuration includes billing information.

Nevertheless, Rappaport teaches “one or more parameters of the desirable configuration is billing information” (Rappaport et al. column 25 lines 49-57).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include billing information in the specific configuration because of engineering design choice and versatility of the information option.

Regarding claim **4**, Sundar, Camille disclose everything claimed as applied above (see claim 2). However, Sundar, Camille fail to specifically disclose the specific configuration includes security information.

Nevertheless, Rappaport teaches “one or more parameters of the desirable configuration is security” (Rappaport et al. column 25 line 49-55).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include security information in the specific configuration because engineering design choice and versatility of the information option.

3. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar, Camille in view of Ramos et al. (US Patent No. 7,072,663 B2 hereafter Ramos).

Regarding claim **5**, Sundar, Camille disclose everything claimed as applied above (see claim 2). However, Sundar, Camille does not explicitly disclose the specific configuration includes service ability.

Nevertheless, Ramos discloses “This configuration information should preferably include the cell capabilities. For example this would include information as to whether if a particular cell is supporting GPRS (general packet radio service) and/or EDGE (8-PSK modulation) in GSM” column 6, lines 31-36).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include service ability in the specific configuration because of engineering design choice and versatility of the information option.

Regarding claim **6**, Sundar, Camille disclose everything claimed as applied above (see claim 2). However, Sundar, Camille does not explicitly disclose the specific configuration includes the congestion status of the system.

Nevertheless, Ramos discloses “Current traffic load of the cell” column 5 line 15).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include congestion status of the system in the specific configuration because of engineering design choice and versatility of the information option.

Regarding claim **7**, Sundar, Camille disclose everything claimed as applied above (see claim 2). However, Sundar, Camille does not explicitly disclose the specific configuration includes the data rates supported by the system.

Nevertheless, Ramos discloses “QoS requirements, such as a guaranteed throughput requirement should be taken into account when selecting the optimum cell. Throughput can be measured as number of bits (or data bits) transferred in one direction across a section per unit time (e.g. bps)” column 6 lines 57-61).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include data rates supported by the system of the system in the specific configuration because of engineering design choice and versatility of the information option.

4. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramos in view of Camille.

Regarding **Claim 16**, Ramos discloses a method for enabling cell selection of preferred service areas (PSAs) (plurality of areas, Claim 36) by a wireless transmit/receive unit (WTRU) (user, Claim 36 and mobile station 2, Fig. 1) in a wireless local area network (WLAN) (network, Claim 36 and WLAN 14, Fig. 1).

communicating with a first network (“user being assigned to at least one of said areas”, Claim 36);

receiving information from the network (“receiving information identifying said plurality of candidate areas”, Claim 36);

detecting the WTRU's location (“information is collected as a function of user position”, Claim 37);

selecting a PSA based upon the received service level system information and a PSA known at the WTRU (“a user being assigned to at least one of said areas and having associated therewith a plurality of candidate areas to which the user may be assigned ... estimating for each candidate area a parameter, said parameter assuming that said user is assigned to said candidate area; and prioritising said plurality of candidate areas which takes into account the estimated value of said parameter; wherein said area with which said user is associated is divided into a plurality of smaller areas and information relating to each of said smaller areas is used in said estimating and/or prioritising step”, Claim 36);

and attaching to the PSA and releasing WLAN ("the network has some other reasons for moving the mobile station to another cell, handover/cell reselection is required", see Column 4, Lines 27-29).

However, Ramos does not explicitly disclose service level system information.

Nevertheless, Camille discloses "In order to request a specific service level specification, the service level requesting means SL_R_M of the personal computer DTE sends an Internet Protocol Control Protocol request towards the network access server DRE for assigning another service level for sending data... Subsequently the service level negotiating and proposing means SL_NP_M hands the propose over to the service level proposal sending means SLP_R_M that in its turn sends an Internet Protocol Control Protocol message that contains the relevant parameters of the propose for the service level to the service level propose receiving means SLP_R_M of the data transmitting element DTE which receives the Internet Protocol Control Protocol propose for the service level" (Camille column 4 lines 4-29).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have service level system information because of engineering design choice and because "the service level specification negotiation and the adaptation is performed in a more efficient way" (Camille column 1 lines 40-42).

Regarding **Claim 17**, Ramos, Camille discloses everything claimed as applied above (see *Claim 16*). In addition, Ramos discloses the PSA locations are stored within the WTRU ("having associated therewith a plurality of candidate areas to which the user may be assigned", Claim 36).

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Camille in view of Sundar.

Regarding **Claim 18**, Camille discloses a wireless transmit/receive unit (WTRU) (fig. 2).

a transmitter configured to transmit a request for service level system information over a bidirectional internet protocol (IP) link at the WTRU ("In order to request a specific service level specification, the service level requesting means SL_R_M of the personal computer DTE sends an Internet Protocol Control Protocol request towards the network access server DRE for assigning another service level for sending data" column 4 lines 4-8).

a receiver configured to receive the requested service level system information over the bidirectional IP link ("Subsequently the service level negotiating and proposing means SL_NP_M hands the propose over to the service level proposal sending means SLP_R_M that in its turn sends an Internet Protocol Control Protocol message that contains the relevant parameters of the propose for the service level to the service level propose receiving means SLP_R_M of the data transmitting element DTE which receives the Internet Protocol Control Protocol propose for the service level" (Camille column 4 lines 22-29).

However, Camille does not explicitly disclose a wireless transmit/receive unit (WTRU) and to allow service operation prior to network selection.

Nevertheless, Sundar discloses an IP link 304, fig. 3 and “the macro network 300 can send 502 information regarding the detection or discovery process to the mobile station 310 on a successful network registration” ([0068]);

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have a wireless transmit/receive unit (WTRU) and to allow service operation prior to network selection because of engineering design choice and because “subscribers are adopting wireless telephony in increasingly large numbers” (Sundar [0005]).

Response to Arguments

6. Applicant's arguments have been fully considered but they are not persuasive.

Applicants have argued regarding claim 1 that “Sundar does not teach that service level system information is received at a WTRU over a bidirectional IP link” (page 5) and that “Camille does not relate to wireless communications” (page 6).

In response to Applicants' argument, the examiner respectfully disagrees. Sundar discloses “the macro network 300 can send 502 information regarding the detection or discovery process to the mobile station 310 on a successful network registration. The information includes the macro network cell-ids where the mobile station 310 should attempt to detect or discover 402' an enterprise WLAN” (Sundar [0068]). This shows that a mobile station establishes communication and receives information for detection or discovery from a network. In addition, Sundar discloses IP

Art Unit: 2462

link 304 in fig. 3 and “a handset may support more than one WWAN macro network technology. For CDMA handsets it is assumed that a WLAN modem will be added to the handset. Additionally, the capability to transport voice as SIP/RTP/UDP/IP packets will be needed” (Sundar [0073]). This shows that the mobile station can establish a bidirectional IP link with the network. Camille discloses “Subsequently the service level negotiating and proposing means SL_NP_M hands the propose over to the service level proposal sending means SLP_R_M that in its turn sends an Internet Protocol Control Protocol message that contains the relevant parameters of the propose for the service level to the service level propose receiving means SLP_R_M of the data transmitting element DTE which receives the Internet Protocol Control Protocol propose for the service level” (Camille column 4 lines 22-30). This shows that a response to a request of service level information is received at a device. Therefore, a combination of Sundar and Camille discloses receiving service level system information at a WTRU over a bidirectional IP link.

Applicants have argued regarding claim 16 that “Ramos does not disclose or teach the receiving of service level system information” (page 7) and “Camille does not disclose or teach receiving service level system information from the network at a WRTU as Camille does not deal with wireless communications” (page 8).

In response to Applicants’ argument, the examiner respectfully disagrees. Ramos discloses “a user being assigned to at least one of said areas and having associated therewith a plurality of candidate areas to which the user may be assigned,

receiving information identifying said plurality of candidate areas” (Ramos claim 36). This shows that a mobile station receives information from a network. Ramos discloses a wireless network in fig. 1. Camille discloses “Subsequently the service level negotiating and proposing means SL_NP_M hands the propose over to the service level proposal sending means SLP_R_M that in its turn sends an Internet Protocol Control Protocol message that contains the relevant parameters of the propose for the service level to the service level propose receiving means SLP_R_M of the data transmitting element DTE which receives the Internet Protocol Control Protocol propose for the service level” (Camille column 4 lines 4-29). This shows that a response to a request of service level information is received at a device. Therefore, a combination of Ramos and Camille discloses receiving service level system information from the network.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2462

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE DUONG whose telephone number is (571)270-1664. The examiner can normally be reached on Monday - Friday: 830 AM-6 PM EST with first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin C. Harper/
Primary Examiner, Art Unit 2462

/Christine Duong/
Examiner, Art Unit 2462
10/07/2009